

# Tips to Improve Mine Inspections

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*(This article is the first in an ongoing SMARA UPDATE series of tips to improve SMARA mine inspections, and inspection reports and notices.)*

## **Preparing for a Mine Inspection: The Inspection Checklist**

The key task in preparing to conduct an adequate mine inspection is to become familiar with the details of the reclamation plan and its components. An essential step of this task is to develop a checklist of all of the reclamation plan requirements, including permit conditions; mitigation measures specified through the CEQA process; requirements of federal agencies if the mine operation is on federal land; and requirements of other agencies directly pertaining to the reclamation standards of SMARA. All of these documents (and potentially others) comprise the reclamation plan if they are referenced in, and attached to, the approved reclamation plan. Examples of items that might be on such a checklist include, but are not limited to:

- Fencing and signage to protect sensitive resources, such as wetlands
- Treatment of sensitive plant species
- Stockpiling and protection of topsoil
- Finished cut slopes
- Treatment of surface drainage
- Status and adequacy of Financial Assurance Mechanisms (FAMs)
- Maintenance of sediment basins

Preparing an inspection checklist requires advanced effort, but once such a checklist is prepared it can be used as a reference on all subsequent mine inspections, with appropriate updates as mining progresses or as plans are amended. A thorough inspection covering all of the requirements of the reclamation plan and other documents protects the operator from unexpected reclamation costs, and the lead agency from being left with unresolved reclamation obligations, and perhaps a lack of funding in the form of an inadequate FAM, to complete them. Note that the new Inspection Report Form MRRC-1, approved by the State Mining and Geology Board in July 2013, includes a reclamation plan checklist built into Section VIII of the form. The new Inspection Report Form can be found on OMR's website at:

[http://www.conservation.ca.gov/omr/SMARA%20Mines/Pages/quarterly\\_reports.aspx](http://www.conservation.ca.gov/omr/SMARA%20Mines/Pages/quarterly_reports.aspx).

## **Sidebar: When are Licensed Professionals Required To Be Involved In Mine Inspections?**

Sections of the State Mining and Reclamation Act (SMARA), the California Code of Regulations, and the California Business and Professional Codes establish when a licensed professional is required to be involved in mine inspections.

The following requirements are from SMARA statute and the State Mining and Geology Board's implementing regulations:

Public Resources Code § 2774(b) "...The lead agency may cause an inspection to be conducted by a state licensed geologist, state licensed civil engineer, state licensed landscape architect, or state licensed forester, who is experienced in land reclamation..."

California Code of Regulations § 3504.5(b) states, “A person, who in the determination of the lead agency has demonstrated competence in performing inspections of surface mining operations, shall perform inspections. *Evaluation of geological and engineering conditions, when required, shall be performed by or under the supervision of a Geologist Registered to practice in the state under the Geologists and Geophysicists Act or a Professional Engineer registered to practice in the state under the Professional Engineers Act.*” (Emphasis added)

From the California Business and Professions Codes:

§ 7835. “Preparation of geologic documents; signing and sealing requirements. All geologic plans, specifications, reports, or documents shall be prepared by a professional geologist or registered certified specialty geologist...they shall be signed by the professional geologist or registered certified specialty geologist or stamped with his or her seal...”

The codes include similar wording related to the practice of professional engineering.

From the California Code of Regulations:

Title 16, Division 29, § 3003. Definitions.

“(d) ‘Professional geological work’ ... requires the application of scientific knowledge, principles and methods to geological problems through the exercise of individual initiative and judgment in investigating, measuring, interpreting and reporting on the physical phenomena of the earth.”

“(f) ‘Practice of Geology or Geophysics.’

(1) The practice of geology...‘for others’ includes but is not limited to the preparation of geologic...reports, documents or exhibits by any...county, city or other public body or by the employees or staff members of such ...when such reports, documents or exhibits are disseminated or made available to the public...

(2) The practice of geology...‘for others’ includes...the performance of geological...services by any individual, firm, partnership, corporation or other association or by the employees or staff members thereof...when the geological...reports, documents or exhibits constituting the practice of geology...are disseminated or made available to the public...”

These statutes clearly establish the requirements for licensed professionals to perform all geologic or engineering determinations related to mine inspections, as well as to those responsible for preparing geological and engineering elements of Reclamation Plans and Financial Assurance Cost Estimates.

As a guideline for where the line is drawn by these statutes regarding the “practice of geology,” a mine inspector who is not a licensed professional may be capable of recognizing cracked or slumping slopes, anomalous conifer growth or orientation, and other indicators of slope

instability. That inspector is in compliance with the above statutes if he or she cites those features and recommends that the operator seek the consultation of a licensed geologist or engineer. However, the line is crossed when an unlicensed person provides opinions about the degree of stability of the slopes or offers slope repair recommendations.